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ABSTRACT

Analysis of survey results from 199 PET (Program for Effective Teaching) trained teachers in three cohorts trained in successive years and from 62 non-PET trained teachers indicate the PET-trained teachers responded favorably to the initial training. Teachers perceive that PET-training has had a positive effect on their classroom performance, and they employ PET concepts regularly. Except for an increased number of coaching observations for recent trainees, the results were consistent across the three groups of PET-trained teachers. Both trained and untrained teachers were asked how many times a year they would like to have their classroom teaching observed for the purpose of improving teaching skills. Non-PET trained teachers desired significantly more observations than those who had received PET training. A factor analysis of variables related to implementation of coaching revealed four coaching behavior factors. Coaching behaviors were generally found to be consistent with the PET model on three of these factors, with approximately half the coaches deviating from the PET model on the fourth factor. (Author/JD)

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TEACHER PERCEPTIONS OF PET

WITH SPECIAL EMPHASIS ON COACHING

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"South Carolina's Implementation of the Hunter Model:
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ABSTRACT

Analysis of survey results from 199 PET-trained teachers in three cohorts trained in successive years and from 62 non-PET trained teachers indicate that PET trained teachers responded favorably to the initial training. The most recent trainees are receiving more post-training coaching than earlier trainees, but, over the three samples, 15% reported no coaching whatsoever. Follow-up conferences are usually held promptly. Teachers perceive that PET training has had a positive effect on their classroom performance, and they employ PET concepts regularly. Sixty-eight per cent reported using PET concepts and terminology at least weekly in discussions with colleagues. Except for an increased number of coaching observations for recent trainees, the results were consistent across the three groups of PET trained teachers. Both trained and untrained teachers were asked how many times per year they would like to have their classroom teaching observed for the purpose of improving teaching skills. Quite unexpectedly, non-PET trained teachers desired significantly more observations (M=2.6) than those who had received PET training (M=1.3). A factor analysis of variables related to implementation of coaching revealed four factors. Coaching behaviors were generally found to be consistent with the PET model on three of these factors, with approximately half the coaches deviating from the PET model on the fourth factor.

TEACHER PERCEPTIONS OF PET
WITH SPECIAL EMPHASIS ON COACHING

INTRODUCTION

Across the United States numerous school districts have implemented staff development programs based on the work of Madeline Hunter. These programs are known by a variety of names such as Program for Effective Teaching (PET), A Clinical Theory of Instruction, Mastery Teaching, Clinical Teaching, Instructional Theory into Practice (ITIP), the UCLA model and the Hunter model (Hunter, 1985).

In South Carolina the model is known as the Program for Effective Teaching (PET), and it is the most widely used of eleven staff development programs in the state (Barbara Gottesmann, personal communication, July 3, 1987). Over 17,400 educators have received PET training in the state since 1984. (Doug Keel, personal communication, February 2, 1988). As the PET program is presented in South Carolina, teachers typically attend 6 to 8 days of instruction interspersed with 4 to 5 days of practice, observations and conferences over a minimum of 4-5 weeks (South Carolina Department of Education, 1985).

The work of Madeline Hunter, from which the PET program is derived, attempts to present traditional instructional principles systematically. She has organized a comprehensive outline which emphasizes learning principles traditionally associated with direct instruction. The essence of the model

is to have teachers make conscious and appropriate decisions as they plan and execute their teaching activities (Hunter, 1979, 1983).

Essential Components of the Model

Madeline Hunter (Garman, Glickman, Hunter, & Haggerson, 1987) was trained as a psychologist and became an administrator at the University Elementary School, a department of the School of Education at the University of California at Los Angeles. Her model of instruction evolves from her experiences in teacher training and focuses on observable behavior of teacher and students. Her version of instructional supervision seeks to "increase instructional excellence" by examining cause-effect relationships in teaching and learning.

She believes that the primary purpose of classroom observation is the collection of data for analysis in terms of cause-effect relationships. This process of data collection and analysis, called coaching, involves classroom observation during which the supervisor creates a written record, called a script tape. This record becomes the focal point of the supervisory conference in which the teacher and coach are expected to discuss what happened during the lesson and examine the teacher's reasoning in decisions related to instruction. Hunter believes that this process is necessary to remediate problems and to stimulate professional growth of teachers.

Madeline Hunter (1985, 1986b) insists that extensive practice with coaching over a period of time is necessary for development of artistic, or expert, teacher-performance. Specifically, she also maintains (a) that it takes approximately two years of in-service training for most principals to master the conferencing skills and (b) that strong leadership from the principal is an important component of the program (Hunter, 1986a, 1986b).

Madeline Hunter proposes a flexible model which does not determine what a teaching decision should be (Davidman, 1984). Instead, she bases her model on the development of conditional knowledge of teaching. Conditional knowledge, according to the Hunter model, rests on a foundation of propositional knowledge and procedural knowledge. She defines propositional knowledge as, "generalizations, validated by psychological research, that identify behaviors affecting learning" (Hunter, 1985). Practice in the application of these propositions in the classroom results in the development of procedural knowledge. The goal is to have the teacher master all three levels of knowledge: (1) propositional, understanding the propositions (2) procedural, being able to perform the procedures, and (3) conditional, knowing when and why various procedures are appropriate and recognizing when modifications are necessary.

Hunter-based staff development programs emphasize a set of essential elements of instruction and principles of learning. The statement of the essential elements of

instruction and description of the principles of learning may vary from one staff development program to another. Davidman (1984) cautions:

> The reader should appreciate, first, that some elements in any given Hunter Staff Development Model-oriented program will not correlate totally with Hunter's clinical theory of instruction, and second, that the model is not static.

The PET model used in South Carolina is derived from the work of Don Roberts, who implemented Hunter-based programs in Virginia and in Arkansas (Tudor, 1984). Madeline Hunter has periodically consulted with leaders in the South Carolina program and visited the state to address groups of educators (Hunter, 1986b; Doug Keel and Gerald Corley, personal communication, July 15, 1987). The essential elements of instruction are identified in PET as:

1. Selecting the objective at the correct level
2. Teaching to the objective
3. Monitoring the learner's progress and making necessary adjustments in the instructional process
4. Maintaining the learner's focus on the objective
5. Using, without abusing, the principles of learning

South Carolina Department of Education materials (1985, 1987) divide selection of the objective (1) into task analysis and diagnostic survey. Teaching to the objective (2) involves explanation, questions, activity, and response to the learner's efforts in terms of the learning. Monitoring progress (3) emphasizes making adjustments based on overt behavior of the students. Maintaining focus (4) includes anticipatory set, active student participation, and closure. In the PET program anticipatory set is subdivided

into three components: involving the learners, stating the learning, and relating the learning to other learning experiences. Closure is a part of maintaining focus in the PET model, but would not be essential in Madeline Hunter's view (Davidman, 1984). The principles of learning (5) in the PET program include motivation, reinforcement, retention, and transfer. A discussion of Bloom's taxonomy of the cognitive domain is also part of the training.

The PET program divides the total teaching act into six interdependent parts. The elements of PET are recognized to constitute only the instructional skills component. PET does not propose to address the other five components, which are identified as content mastery, planning skills, skills in the selection and use of materials, classroom management skills, and human relations skills.

Basis for the Study

Madeline Hunter has stated that two years of practice with adequate coaching are necessary to develop artistic performance in teaching (Hunter, 1986a, 1986b; Hunter and Russell, in press; South Carolina Department of Education, 1987). Consequently, this study was designed to compare the attitudes and behavior of the three groups of teachers who had been trained in the first, second and third years of the PET program in South Carolina. This design allowed comparison of teachers who had completed training and therefore, were eligible for PET coaching from the beginning

of the 1986-1987 academic year (PET0) with teachers who had been eligible for coaching for one (PET1) and two (PET2) additional years. The study surveyed a fourth group of teachers who had not been trained in PET (NOPT) to determine how frequently their classroom performance had been observed and how frequently they desired classroom observations for instructional improvement.

The understanding that teachers have acquired about the Hunter model, according to some educators (Brandt, 1987b; Gibboney, 1987a; Ross & Kyle, 1987; Rosenshine, 1986), is that it is best suited for direct instruction. That is, it addresses the learning principles appropriate for objectives of knowledge, comprehension, application, which are typical of objectives for the elementary grades, as opposed to higher-order objectives of analysis, synthesis, and evaluation. Since direct instruction is assumed to be more frequently appropriate at lower grade levels and in structured content areas, this study was limited to grades one through four.

REVIEW OF LITERATURE

The widespread use of the Hunter-based programs for staff development has generated great debate on at least three major issues. Included are: (1) critiques of the instructional and supervisory components of the model, (2) methods of implementing the Hunter-based programs, and (3)

the need for research on the effects of implementing the staff-development programs.

Critiques of Model Components

The following comments are judgments which are not based on data. Instead, they are the opinions of educators who have studied models of classroom instruction and teacher supervision in various settings.

Madeline Hunter insists that the essence of her model is appropriate decision making (Hunter, 1987a, 1987b, 1986a, 1986b, 1985, 1983, 1979; Wolfe, 1987). The teacher who has acquired conditional knowledge of teaching should be able to recognize cause-effect relationships in teaching and explain instructional decisions. Slavin (1987) has said that Hunter's ideas are "common-sense translations of well-founded instructional theory put into practical terms." Some educators (Freer and Dawson, 1987) testify to the merits of the model, citing its clarity, vocabulary, and immediate applicability as advantages.

However, other educators find fault with the Hunter model. Ceroni (1987) stated that the model is rigid and limiting, especially for complex learning. Gibboney (1987a) criticized the Hunter model as technique-oriented, non-intellectual, and mechanistic.

Davidman (1984) has noted that Hunter's emphasis on the role of the principal as instructional leader in the school

is well fitted to the organizational pattern of American culture. However, he argues that the model could be improved in at least two ways. First, he argues for a new category of instructional decisions related to teaching strategy. The model assumes that the form of instruction will be appropriate to the style of the teacher, needs of the learners, and context of the educational setting (including the economic and educational levels of the community and the and prevalent cultural influences and values). The choice of strategy is not made explicit. For example, consideration of the appropriateness of discovery versus didactic format is not included in the model. Second, Davidman argues that in focusing on universals, the model fails to address the specific cultural context of the educational setting and neglects the influence of environmental factors outside the classroom. He issues cautions in a third area, warning of problems with language which has the effect of making stronger claims than are warranted by speaking of "the" essential elements of instruction and making predictions from propositions which have been only partially validated by research.

In discussing the supervisory component of the model, Pavan (1986) notes that elimination or diminished use of the preobservation conference to refine a teacher-initiated focus causes problems. This results in loss of collaboration between observer and teacher and creates a model of clinical supervision. Such a model is distinct from

that described by Cogan (1973) and Goldhammer (1980) who support the use of the preobservation conference.

Taking a somewhat different position, Wildman and Niles (1987) identify autonomy, collaboration, and time as essential conditions for professional growth of teachers. This latter view is consistent with the position of Noreen Garman and with the peer coaching model advocated by Bruce Joyce (Brandt, 1987a). Carl Glickman (Garman, Glickman, Hunter and Haggerson, 1987) proposes a developmental model of teacher supervision which combines elements of direct and reflective supervision.

Implementation of the Model

Two aspects of model implementation discussed in the literature are the nature of the programs derived from the model and the use of the model to evaluate teachers. Slavin (1987) warns of the danger of "large-scale, mandated implementation of a stripped-down formula-like application of her principles, as is occurring today." Pavan (1986) notes several problems with implementation of the Hunter model. Among them are inadequate preservice training for school administrators and a tendency of some supervisors to use the model as a checklist for effective instruction in direct violation of the theory. She argues that requirements and certification for trainers should be made rigorous.

In response to such criticisms, Madeline Hunter (1985) has acknowledged problems in the translation of the model

into practice. She has repeatedly urged that those who apply the model need to move from propositional knowledge through procedural knowledge to conditional knowledge (Brandt, 1985; Davidman, 1984; Hunter, 1985, 1986b). She acknowledges that many leaders have not been adequately trained. Hunter believes promoting the model by beginning with teachers is an error. She argues that administrators need to become expert in translation of the theory into practice in order to be effective supervisors. She has stated, "Educators must develop conditional knowledge to determine under what conditions procedural skills should be used." (Hunter, 1985)

Garman and Hazi (1987) reported problems with the use of the Hunter model for evaluation in Pennsylvania. There, the model was presented through a series of two-day supervision/ evaluation workshops under a variety of names. These researchers reported that more than two-thirds of the teachers they surveyed produced responses ranging from uneasiness to anger. In another paper, Hazi (1987) noted, "The (Pennsylvania) state department of education unintentionally promoted this single model of supervision and thus a single model of teaching." Haggerson (1987) has suggested that the language of the Hunter model encourages a literal evaluation procedure which appeals to the current trend toward accountability. He warns that such literal and quantified evaluation procedures may have dire consequences.

Research on Model Effects

Research evaluating the use of the model has been limited. The model was evaluated in one inner-city school in Los Angeles where achievement scores were exceptionally low when compared to national norms (Hunter, 1985, 1987). In Arkansas a study (Dildy, 1982) of sixteen teachers of 412 fourth, fifth, and sixth graders revealed some differences in achievement subtest scores in mathematics, language, social studies, and science after a five month intervention with PET training. The Napa California project (Stallings 1987; Stallings and Krassavage, 1986; Robbins and Wolfe, 1987) used ITIP to train 15 teachers in two schools and studied them over a four year period. Teachers' instructional skills, student engaged rate and student achievement showed a tendency to increase for the first three years, but declined in the fourth year when supervised coaching by administrative personnel was deleted from the program. Additionally, students in the experimental schools did not significantly outperform students in the control schools in either reading or math. The control schools were not a part of the initial evaluation design of the Napa project and comparisons were limited (Robbins, 1986). The relatively small sample sizes and the restricted academic and socioeconomic characteristics of the student populations in these studies make generalization of their results problematical.

Others have raised questions regarding the results of training. Included are the effectiveness of the model for

changing teacher behavior (Anderson and Kameen, 1985), and consequent effects on student achievement (Slavin, 1987, Gibboney, 1987b). In making an appeal for more thorough evaluation of the programs, Slavin (1987) asks whether the implementation of programs based on Hunter's theory would make an educationally meaningful difference in student achievement. Both Gibboney (1987a, 1987b) and Slavin (1986, 1987) stress the lack of research to support the claim that applying the Hunter model improves learning.

Guskey (1985a, 1985b) has asserted that the most significant changes in teacher attitudes and beliefs come after they have successfully implemented practices from staff development programs. Therefore, it is important to allow teachers an opportunity to implement the learning acquired in staff development programs before attempting to evaluate their utility or success.

Previous evaluations have been limited to a few teachers and schools; to date no evaluations of state-wide implementations of Hunter-based staff development programs have been reported. Clearly, a survey of the literature indicates that a number of questions have been raised about the theoretical aspects of the model, methods of employing the model for staff development, and the inadequacy of the research base. Very few studies have addressed the implementation of the model. This paper describes a study which was designed to investigate the attitudes and behaviors of South Carolina educators trained in PET.

RESEARCH PROBLEMS

This study explored three main aspects of the PET program as implemented in South Carolina. First, the study examined teachers' perceptions of the quality of initial PET training. Second, the study focused on coaching subsequent to training, especially the quantity and quality of coaching. Third, teachers were asked to report their perceptions of the effects of PET on their behavior and attitudes. Specifically, they were asked (1) how frequently they used PET terminology and concepts in planning lessons and conferring with colleagues; (2) whether they believed the training had improved their classroom performance; and (3) whether the program increased their understanding of the teaching process or helped them develop more confidence in their own teaching ability.

Because the model stresses quality coaching over an extended period of time as an essential component, this study compared perceptions of the three PET trained cohorts. The research included comparisons of these groups with a sample of non-PET trained teachers with regard to the desire for formative observations.

METHOD

This study was limited to teachers in grades one through four whose instructional assignments were identified as self-contained classrooms. Teachers trained in each of the first three years of the PET program and teachers who had not been

trained in PET formed the four groups included in the study. Because the number of teachers in the first cohort of PET-trained teachers was relatively small, all teachers from that group were included in the sample. The three remaining groups were randomly selected with control for the socioeconomic composition of their classes and grade assignments. Professor Mandeville extended the results of this survey to a comparison of student achievement data; he will describe the sampling procedure in greater detail in his presentation.

Two questionnaires were designed to collect data on perceptions of PET training and coaching and on quantity of coaching. The questionnaires were developed from theory and from interviews with trainers, administrators, and classroom teachers. The form for PET trained teachers included an 18-item section which requested information on the quality of coaching since training. It was designed to measure teacher perceptions concerning behaviors of their coaches. The specified behaviors were related to appropriate coaching as implied by the PET model and included five conversely phrased items to reduce response set. These 18 items were rated on a five-point Likert scale. A shorter questionnaire was used to collect information from non-PET-trained teachers. Both questionnaires were reviewed by PET-trained coaches and by educational administrators for content validity, and they were edited and pilot tested before use. (Copies of the questionnaires are included in the appendix.) The construct

validity was further assessed by performing a factor analysis after the data were collected. Based on the results of the factor analysis, four scale scores were determined, and reliabilities were computed for each of these subscales.

Questionnaires were mailed to 239 PET-trained and 95 non-PET-trained teachers on April 17, 1987. Between May 6 and May 19 PET coordinators in districts with low return rates (more than 3 questionnaires not returned) were contacted. They were given names of teachers whose questionnaires had not been received and an indication of the researchers' willingness to supply additional forms if necessary. Additional forms were mailed to 7 PET-trained and 3 non-PET-trained teachers.

RESULTS

The returned questionnaires indicated that 3 teachers in the PET groups had been misidentified or changed to another grade level. Nine teachers in the non-PET group reported that they were currently involved in the training process. Data for these 12 responses were deleted. PET trained groups were coded PET2 (teachers trained 2 years prior to the beginning of the 1986-1987 academic year); PET1 (teachers trained 1 year prior to the beginning of that year); and PET0 (teachers trained less that 1 year before the start of the 1986-1987 year). Teachers who had not been trained in PET were coded NOPT. Total responses analyzed were 199 PET-trained teachers (53 PET2, 79 PET1, and 67 PET0) and

62 non-PET-trained teachers: 270 female (98.2 %) and 5 male (1.8%); 52 black (18.9%), 2 Indian (0.7%), and 221 white (80.4%). Teachers sampled included 69% with continuing contracts, 30% with annual contracts, and 0.004% with a provisional contract. Data analyzed represented 83.3% of the PET teachers and 65.3% of the non-PET teachers who were sent forms.

Chi square analysis showed no significant differences among the four groups of teachers by sex, race, grade level, or type of contract. Motivation for training was classified as voluntary, requested (by principal), and required (either by district policy or for recertification credit). Chi square analysis failed to find significant differences among the PET-trained groups on these three motivation classifications.

Analysis revealed no significant differences among the four groups on teacher age or class enrollment. An ANOVA ($F = 3.58$, $p < .0145$) with Scheffe post hoc analyses revealed significant differences in years of experience between the teachers trained in PET three years ago and the teachers trained one year ago. (See TABLE 1). Teachers in the first group averaged 13.72 years of experience while teachers in the most recently trained group averaged 9.59 years of experience.

The difference in years of teaching experience across the three PET groups suggests that subsequent analyses should be adjusted for this dissimilarity. However, number of years

of teaching experience was not found to be related to the dependent variables, so analyses of covariance were considered unnecessary.

Insert Table 1 about here

Validity and Reliability of Scale Scores

For the items related to coaching after training, the "strongly agree" response was coded 1; agree, 2; no opinion, 3; disagree, 4; and strongly disagree, 5. Scoring was reversed for the five conversely phrased items.

The researcher was concerned that teachers who had average annual coaching observations of less that one per year, teachers who had observed only by someone other than a principal or PET trainer, or teachers who had been observed only for evaluation might still have responded to items related to coaching. Since such responses would be of questionable validity, they were excluded. These qualifications limited responses analyzed in the factor analysis to those of teachers who had indeed been coached, according to the most restrictive definition of coaching used in this study.

A principal axis factor analysis with varimax rotation was then performed to facilitate interpretation of the items related to coaching behaviors. (Kaiser's measure of sampling adequacy = 0.86; the rotated factor pattern is presented in

TABLE 2.) A four-factor solution based on eigenvalues greater than one resulted.

Insert Table 2 about here

For simplicity, the scores on these factors were computed by the average of the items with the largest loading on the factor, as long as the loading exceeded .5. The led to the elimination of two items: coach asked the teacher to describe decisions (Item 8.5) and coach helped the teacher consider alternatives (Item 8.10). These items are conceptually important, but contributed little to the variance on the coaching factors. One item, (8.8) which requested information about the coach's listening behavior, loaded on both the Focus and Analysis factors. It was included in the Analysis scale because its loading on that factor was slightly larger.

The four factors identified by the factor analysis are represented by the acronym FAME: Focus, Analysis, Moderation, and Equivocation. The item composition of these factors follows:

FOCUS: (6 items)

1. Conference focused on specific instructional skills.
2. Coach communicated to teacher the specific objective of the conference.
3. Coach helped teacher analyze the lesson using PET terminology.
4. Teacher had a clear idea of what had been accomplished in the conference.
5. Teacher was informed in advance of the purpose of the observation.
6. Coach reinforced the strengths of the lesson.

ANALYSIS: (5 items)

1. Coach shared the labeled script tape from the lesson with the teacher.
2. Coach discussed the relevant behaviors in the lesson in terms of effectiveness and efficiency.
3. Teacher was actively involved throughout the conference.
4. Coach listened carefully to teacher's comments.
5. Coach helped teacher discover possible solutions if there was a problem.

MODERATION: (3 items)

(These items were originally phrased so that agreement would have been contrary to appropriate practice as defined in the PET program. The scoring was reversed, and the statements below were reworded so that agreement is congruent with the PET model and with the scoring used in the factor analysis.)

1. Inappropriate suggestions were absent from the coach's behavior.
2. Overwhelming suggestions were absent from the coach's behavior.
3. Coach allowed teacher to explain decision.

EQUIVOCATION: (2 items)

(These items were originally phrased so that agreement would have been contrary to appropriate practice as defined in the PET program. The scoring was reversed, and the statements below were reworded so that agreement is congruent with the PET model and with the scoring used in the factor analysis.)

1. Coach did not immediately point out what were believed to be mistakes.
2. Coach did not offer unsolicited opinions about how the lesson should have been taught.

The Focus factor was composed of items related to the issue of the keeping the conference focused in terms of purpose, objectives, specific skills addressed, summary of accomplishments, use of PET terminology, and emphasis on strengths of the lesson. The Analysis factor items were related to listening and to involving the teacher in a

discussion of the effectiveness and efficiency of behaviors recorded in the script tape of the lesson.

The items which loaded on the Moderation factor were those which, as originally worded, described inappropriate and overwhelming suggestions and refusal to allow explanation by the teacher. Since teachers' responses indicated that such excessive departures from the model were essentially absent, the word moderation seemed to describe the reported coaching behaviors.

The last factor was called the Equivocation factor because the coaches were roughly evenly divided in their tendencies to perform or not to perform the behaviors included and because its significance is subject to more than one interpretation. It included exercising restraint in pointing out what the coach believed to be mistakes and withholding unsolicited opinions about how the lesson should have been taught.

Scale scores were computed by averaging the raw score the items in each factor for each teacher. Cronbach's alpha was used to compute reliability for the subscales of the coaching scale. Reliabilities for the factors within the coaching scale were .86 for Focus, .75 for Analysis, .86 for Moderation, and .72 for Equivocation.

Perceptions of Training

An ANOVA on the three trained groups revealed a significant difference in the number of coaching observations

during PET training (F= 13.49, p < .0001). Post hoc analysis found differences among all groups, with number of training observations increasing over time. Means and standard deviations are presented in TABLE 3.

Insert Table 3 about here

On the remaining aspects of the training, results did not differ significantly among the PET groups. Therefore, the responses of the three groups were aggregated. Item responses are presented in TABLE 4.

The majority of teachers (62%) evaluated overall coaching during PET training as "excellent." Another 32% rated coaching during training as "good." The categories of "fair" and "poor" drew responses from only 5% of the teachers in the sample.

Categories of "strongly agree" and "agree" combined accounted for over 95% of the responses on the other three items related to training. Teachers reported that the concepts in training were presented in a clear, organized, and focused manner (97%); that the examples and activities were relevant and applicable to a classroom setting (98%); and that the PET trainers modeled principles of learning during the presentations (98%).

Insert Table 4 about here

Coaching Subsequent to Training

The data were examined to determine the frequency of coaching observations by cohort. Teachers were asked to report the total number of coaching observations since completion of PET training. When the trained groups were compared on post-training coaching observations, the data were adjusted for length of time since training. Total post-training observations were divided by the number of years since training to provide the average number of observations per year for each of the three groups. ANOVA on the adjusted number of coaching observations and post hoc analyses revealed that the most recently trained group reported significantly more annual coaching observations than the other two groups ($F = 5.49$, $p < .01$. With observations by principals, PET trainers, other administrators, and peers included, the mean for the most recently trained group was 2.82 as compared to means of 1.65 for the first group of trainees and 1.74 for the second. (See TABLE 5.) Twenty-nine teachers (14.6%) reported no coaching observations from any source. Of those reporting no observations, 6 (3%) were from the PET2 group, 11 (about 5.5%) were from the PET1 cohort, and 12 (6%) were from the PET0 group.

Insert Table 5 about here

Teachers were initially classified as having been "coached" if their adjusted coaching observation score was at

least one (minimum of one coaching observation per year by PET trainer, principal, or other) and if they had also responded to at least ten of the eighteen items requesting information on post-observation conferencing. This restriction was imposed to ensure that any teachers who were not coached, but might have been observed for evaluation, were eliminated from the analysis. Subjects who did not meet these requirements were defined as "not coached." Of the total group of PET trained teachers approximately 61% met the "coached" criteria described above.

Observations by persons other than PET trainers and principals might have followed a different supervisory model. The need to maintain validity suggested that the analysis of coaching be restricted to teachers reporting observations by persons who could be identified as PET coaches. For this reason, the coaching variable was redefined by further limiting observations to those by PET trainers and principals; under this condition, the percent coached was reduced from 61% to 57%. The information which follows is based on the analysis of observations which met the more stringent criteria. The three PET groups were not significantly different on the coaching variables, so item responses were again aggregated.

The amount of time between coaching observation and follow-up conference was requested. Roughly 76% of the trained teachers reported that conferences were generally held the day of the observation; another 13% reported

conferences the day after the observation; 10% said conferences were usually two to five days later; less than 1% reported a delay of more than five days.

Although the 18 coaching items were mainly used to create the four subscales, the responses were also examined at the item level. TABLE 6 presents results of the items relating to the quality of coaching since PET training. Results on five of the items indicated a tendency of some observers to deviate from the coaching model. In contrast to relatively high congruence with the PET model on most of the items, only about 79% of the teachers reported that the coach asked them to describe decisions made in planning the lesson, and only about 70% reported that the coach helped them consider alternate ways of teaching. About 15% of the teachers reported that coaches did not share a script tape of the observed session. Almost 50% of the teachers reported that the coach offered unsolicited opinions about how the lesson should have been taught. Approximately 42% of the teachers indicated a tendency of coaches to point out mistakes immediately; however, almost 99% of the teachers felt that the conference focused on strengths of the lesson.

Insert Table 6 about here

Graphs of the item distributions revealed a strong tendency for coaches to follow the model on the Focus, Analysis, and Moderation factors and a tendency for about

half the coaches to deviate from the model on the items in the Equivocation scale. Distributions of the main items in each factor are presented in graphs 1 through 4.

Insert Graphs 1 through 4 about here

Comparisons Involving Coaching

Since no significant differences were found on the subscale scores (Focus, Analysis, Moderation, Equivocation) among the three cohorts of trained teachers, the researcher attempted to identify other factors which were related to PET coaching. One possible variable was the professional role of the person serving as coach. When scale scores were analyzed by comparing groups who reported having been coached by trainer, principal, or both trainer and principal, a significant difference was found on the analysis scale between teachers coached by the principal only and teachers coached by both principal and PET trainer ($F=5.33$, $p = .0065$. See TABLE 7). Teachers coached by both principal and PET trainer had mean analysis scores ($M=1.63$) that were more congruent to the PET model than those teachers who reported observations by the principal only ($M=2.03$). Too few teachers reported having been coached only by the trainer to allow adequate comparison for that group.

Insert Table 7 about here

This finding led to consideration of the professional role of the coach on specific items. Analysis of variance showed that teachers coached by both principal and trainer (M=2.01) reported greater tendency to consider alternative methods (F=3.58, p=.0317) than teachers coached by the principal only (M=2.63). Similarly, on the item regarding the use of script tape, ANOVA revealed that teachers coached by both principal and trainer (M=1.9) reported more sharing of script tape (F=4.38, p=.0153) than teachers coached by the principal only (M=2.70). Means are reported in TABLE 8.

Insert Table 8 about here

Perceived Effects of Training

Two-way analysis of variance failed to detect statistically significant differences on any of the six variables related to perceived effects of training among the three cohorts or between teachers defined as "coached" and those defined as "not coached." Four of these variables requested teachers' perceptions of change in their classroom behavior, and two were inquiries related to frequency of use.

A large majority of teachers believed that the program had a positive effect on classroom performance (92%), increased their confidence in their teaching ability (85%), increased their understanding of why certain procedures work well (88%), and led them to incorporate some new techniques into their teaching (93%).

Teachers were asked to report how often they use PET concepts or terminology in discussing classroom teaching performance with colleagues and how often they consciously employ PET concepts in making lesson plans. More teachers reported that they employed PET concepts on a daily basis in making lesson plans than in discussing classroom teaching with colleagues. Sixty-eight per cent said that they employed PET concepts daily in making lesson plans, and about 91% reported at least weekly use in planning. Nine per cent reported infrequent use in planning (monthly or rarely). While only 32% of the teachers reported using concepts and terminology in daily discussions with colleagues, 68% reported doing so at least once a week. The remaining thirty-two per cent said they used the concepts and terminology less often (monthly or rarely) to discuss performance. Item response rates are presented in TABLE 9.

Insert Table 9 about here

Trained teachers were invited to offer additional comments, and 75 teachers (38%) responded. Although the majority (56%) of the comments were favorable, about 27% were negative and 17% were mixed comments. Nine per cent of the comments suggested that PET would be especially beneficial for undergraduates or beginning teachers, while twenty per cent of those who commented thought the training was repetitious of prior educational and staff development experiences. Six per cent complained that the model was

restrictive. Five per cent of those who commented resented being coerced into taking the training or objected to being away from their classrooms for staff development activities. Four per cent specifically jndicated that they no longer needed to be observed. Three per cent reported that the coaching activities during training were unduly stressful. One comment specifically objected to the use of the PET model as part of teacher evaluation.

Observations and Perceptions of Non-PET Trained Teachers

Forty-five per cent of the non-PET teachers reported no staff development with the specific goal of improving instruction within the last year. Twenty-eight per cent of the non-PET trained teachers were involved in some organized peer observation program. Principals (15%) and other administrators (19%) also made formative observations of non-PET teachers.

Non-PET-trained teachers were asked about their perceptions of PET training. Some responded to more than one category. Approximately 2% reported no knowledge of the program; 52% reported knowing a little about PET; 11% said they had learned a lot about the program and tried to apply some of the concepts; and 39% responded that to the best of their knowledge they already apply the principles of PET without having been through the training.

Desire for Coaching

Teachers in all groups were asked how many times per year they would like to have their classroom teaching observed for the purpose of improving teaching skills. For teachers trained in PET the question was worded to ask specifically how many times per year they wanted to receive coaching with the PET model. A one-way ANOVA revealed significant differences across the four groups ($F = 12.30$, $p < .0001$). Scheffe post hoc analyses showed that the non-PET trained teachers desired more classroom observations than teachers from the other three groups. Non-PET-trained teachers requested an average of 2.6 observations annually, while averages of PET-trained groups ranged from 1.1 to 1.5 desired coaching observations per year. TABLE 10 presents the means and standard deviations.

Insert Table 10 about here

TABLE 11 presents a chi square analysis used to compare the proportions of teachers who wanted no coaching at all. The four groups were found to be significantly different (Chi square = 11.88, $p < .01$). Using a post hoc procedure analogous to the Scheffe method appropriate to chi square comparisons (Marascuilo & McSweeney, 1977), the non-PET trained teachers had a significantly smaller proportion who wanted no classroom observations than the average of the three PET trained groups. Only about 5% of the non-PET-

trained teachers wanted no coaching observations, as opposed to 23% of the PET- trained teachers.

Insert Table 11 about here

The finding that almost one-fourth of the PET trained teachers wanted no more coaching suggested to the researcher that teachers who indicated a desire for coaching might differ from those who preferred none on other variables. Although these dependent varaibles are, at best, quasi-interval data, common practice is to analyze such data using parametric procedures. PET-trained teachers who requested coaching and those who wanted none differed significantly in their evaluation of coaching during PET training (T=3.5, p=.0006). Teachers who wanted coaching were more likely to have reported observations by someone other than the principal or PET trainer (T=-2.98, p=.0035). Significant differences between teachers who requested coaching and those who preferred not to be coached were also found in their perceptions of positive effects of the training (T=3.36, p=.0004), increased confidence in teaching ability (T=3.97, p=.0004), increased understanding of classroom procedures (T=3.70, p=.0008), and incorporation of new techniques (T=4.01, p=.0003). Frequencies of formative observations desired by teachers in each group are presented TABLE 12.

Insert Table 12 about here

Teachers who had been coached were compared to teachers who were not coached (according to the criteria of this study) on their desire for coaching. Chi square analysis failed to reveal significant differences.

DISCUSSION

Results of this study must be interpreted cautiously, since the population was limited to teachers in self-contained classrooms in grades one through four in South Carolina, where the program was presented as a staff development model rather than as an evaluation model. There are probably selection factors operating in the choice and motivation of teachers for PET training. This research may not be generalizable to content areas which are less highly structured.

Reactions to the PET training were very positive. Respondents reported high overall quality of training and indicated that they apply the training in their classrooms. Rigid application of the Hunter model, such as that reported in the literature, does not currently seem to be great source of complaint in South Carolina.

The South Carolina Department of Education identified a major goal of the training as providing a common parlance for educators in the hope of fostering collegiality. More than two-thirds (68%) of the PET trained teachers reported using PET concepts and terminology in professional communication at least weekly, while 32% reported such communication monthly

or rarely. This finding indicates that the terminology has gained wide acceptance. The task of teaching demands daily lesson preparation, so greater frequency in use of the model for planning than for communication is predictable.

Quantity of coaching for PET-trained teachers has been relatively low. The FAME factors (focus, analysis, moderation, equivocation) reveal that coaching behavior is relatively consistent with the PET model on the first three scales, but not on the fourth. The Moderation factor and the Equivocation factor were both composed of items which had originally been worded so that agreement would reflect inappropriate practice of PET coaching. These items and the inquiry about use of script tape were included to investigate how well current coaching practice fit the model. Practice consistent with the PET model could be expected to produce one factor containing all six of these items. Coaching did appear to fit the model for the three items in the Moderation factor, but the two items in the fourth factor revealed inconsistent practice among coaches.

Coaches could be equivocating by being quick to criticize and by offering unsolicited opinions either because they are unwilling to conform to the conferencing procedures of the PET model or because their conferencing skills need refinement. One interpretation is that the skills included in the Equivocation factor are more difficult to master than those in the Moderation factor.

The two items investigating whether teachers were asked to describe decisions and whether the coach helped the teacher think about alternative ways of teaching did not meet the criteria used in this study for inclusion in any factor. The almost one-to-one correspondence between these two items and the concepts of appropriate decision making and conditional knowledge of teaching underscore their theoretical importance. These items are conceptually related to the Analysis scale. The item data and their exclusion in the factor analysis indicate that, despite the theoretical emphasis on having the teacher describe decisions and consider alternative methods, these aspects of the conference process are receiving less emphasis than some others.

If skills of pedagogy were ordered on a continuum, it is probable that the abilities of reflecting on possible options and making appropriate choices would rank as the most difficult to acquire. They may be equally difficult topics for coaches. One additional discrepancy is evident in the finding that some coaches are failing to provide script tapes. Therefore, in both quantity and quality, the coaching portion of the model has yet to be fully implemented.

The surprising finding in this survey is that PET trained teachers want fewer classroom observations than non-PET trained teachers. That finding cannot be fully explained from the data gathered to this point. The contrast between apparent acceptance of the theory and low frequency of desired observations suggests that the observations might be

perceived unfavorably by teachers. The fact that non-PET teachers differed from PET trained teachers in the number of classroom observations requested may rest on the their perceptions of formative observations.

The finding that almost one-fourth of the trained teachers want no coaching suggests possible need for an expanded, more flexible model. Other supervision models which emphasize autonomy and collaboration and offer choices such as individual reflection or peer coaching might be options. Coaching by someone who is not directly responsible for teacher evaluation may be a desirable alternative. Finally, the conferencing skills of the coaches, especially their ability or willingness to conform to the PET model, may need attention.

Coaching behavior as defined by Madeline Hunter requires conditional knowledge of both teaching and conferencing (essentially a subset of counseling skills overlaid on pedagogy). In a recent article (Hunter, 1986a) she commented on the findings of the Napa study:

> "It is possible that the principals' project training was too diluted by other types of in-service for them to develop the competence needed to exert leadership during the fourth year of the project. In the Hunter model, the principal's frequent observation and coaching of teachers are critical. It takes about 2 years for principals to master related script taping, analyzing, and conferencing skills."

Information in this study shows that the quantity of coaching has been low and that some coaches are equivocating in their application of the model. Several interpretations are possible: (1) coaches may need to refine their skills

through further training; (2) principals may prefer that the coach be someone who is not directly responsible for teacher evaluation; (3) principals may prefer another supervisory model; (4) principals may believe that their time is better allocated to other activities; (5) the social context of the school may interact with the preceding factors.

Subsequent studies might explore affective reactions of teachers to the coaching process. Future investigators should compare peer conferencing or other supervision models with the PET model and study PET-trained and coached teachers in a longitudinal design. Results of this study suggest that subsequent research might analyze the relationship between years of teaching experience and perceived utility of the training. In addition, future research needs to investigate the effects of PET training at higher grade levels and across various content areas.

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TABLE 1
ANOVA ON TEACHER EXPERIENCE

	N	MEAN EXPERIENCE	(SD)
PET-2	53	13.7 *	(6.8)
PET-1	80	11.7	(6.6)
PET-0	69	9.6 *	(6.0)
NOPET	73	10.8	(8.6)
TOTAL (N=275)		11.3	(7.2)

* marks groups significantly different on Scheffe post hoc analysis.

TABLE 2
ROTATED FACTOR PATTERN

	FOCUS	ANALYSIS	MODERATION	EQUIVOCATION
SPECIFIC SKILL	.82240	.	.	.
SPECIFIC OBJECTIVE	.76952	.	.	.
ANALYSIS USED PET	.70188	.	.	.
CLEAR WHAT WAS ACCOMPLISHED	.66100	.	.	.
INFORMED IN ADVANCE	.64843	.	.	.
EMPHASIZED STRENGTHS	.57166	.	.	.
SHARED SCRIPT TAPE	.	.73994	.	.
EFFECTIVENESS AND EFFICIENCY	.	.70716	.	.
TEACHER ACTIVELY INVOLVED	.	.64983	.	.
LISTENED TO TEACHER	.54593	.60123	.	.
POSSIBLE SOLUTIONS	.	.51594	.	.
ALLOWED TO DESCRIBE DECISIONS	.	.	.	.
NO INAPPROPRIATE SUGGESTIONS	.	.	.84882	.
NO OVERWHELMING SUGGESTIONS	.	.	.80762	.
DID ALLOW EXPLANATION	.	.	.75189	.
DIDN'T POINT OUT MISTAKES	.	.	.	.83830
NO UNSOLICITED OPINIONS	.	.	.	.82371
CONSIDERED ALTERNATIVES	.	.	.	.

Values less than 0.5 have been printed as '.'.

TABLE 3
TRAINING OBSERVATIONS BY GROUP

	MEAN	SD
PET2	3.8 *	0.9
PET1	4.3 *	1.0
PET0	4.8 *	0.9
TOTAL PET	4.3	1.0

* marks groups significantly different on Scheffe post hoc analysis.

TABLE 4
TEACHERS' PERCEPTIONS OF QUALITY OF PET TRAINING
EXPRESSED AS PERCENTAGE OF TEACHERS RESPONDING TO ITEM

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE
TRAINING CLEAR	64.8	32.2	1.0	1.5	.5
TRAINING RELEVANT	60.6	37.4	.5	1.0	.5
TRAINER MODELED	65.7	32.8	.5	.5	.5

	EXCELLENT	GOOD	FAIR	POOR
OVERALL QUALITY OF TRAINING	62.4	32.5	4.6	.5

TABLE 5
ADJUSTED NUMBER OF COACHING OBSERVATIONS SINCE TRAINING

	MEAN	SD
PET2	1.65	1.36
PET1	1.74	1.41
PET0	2.82 *	3.30

* marks groups significantly different on Scheffe post hoc analysis.

TABLE 6
TEACHERS' PERCEPTIONS OF COACHING CONFERENCES SINCE PET TRAINING
EXPRESSED AS PERCENTAGE OF TEACHERS RESPONDING TO ITEM

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE
INFORMED IN ADVANCE	57.4	35.5	3.5	3.5	.0
FOCUS ON SPECIFIC SKILL	52.8	38.7	2.8	4.9	0.7
ANALYSIS USED PET TERMINOLOGY	57.7	39.4	2.1	0.7	.0
OBSERVER GAVE UNSOLICITED OPINIONS *	16.3	33.4	11.3	24.8	14.2
TEACHER ASKED TO DESCRIBE DECISIONS	29.8	48.9	11.3	9.9	.0
OBSERVER IMMEDIATELY IDENTIFIED MISTAKES *	12.8	29.1	8.5	31.2	18.4
DISCUSSED EFFECTIVENESS					

& EFFICIENCY	45.1	52.8	2.1	.0	.0
COACH LISTENED TO TEACHER'S COMMENTS	52.1	45.8	2.1	.0	.0
FOCUSED ON STRENGTHS	64.8	33.8	1.4	.0	.0
CONSIDERED ALTERNATE METHODS	26.8	43.0	21.8	6.3	2.1
TEACHER ACTIVELY INVOLVED	56.4	40.8	1.4	1.4	.0
SHARED SCRIPT TAPE	41.4	34.3	9.3	8.6	6.4
SPECIFIC CONFERENCE OBJECTIVE	49.3	43.0	4.2	3.5	.0
POSSIBLE SOLUTIONS IF PROBLEM	31.2	47.1	21.0	0.7	.0
CLEAR IDEA OF WHAT WAS ACCOMPLISHED	51.5	40.1	4.9	2.1	1.4
TEACHER NOT ALLOWED TO EXPLAIN DECISIONS *	0.7	0.7	3.6	49.3	45.7
INAPPROPRIATE SUGGESTIONS *	2.1	2.1	4.3	44.0	47.5
OVERWHELMING SUGGESTIONS *	1.4	4.3	7.9	38.8	47.5

* Agreement on this item is contrary to the PET model.

TABLE 7
MEANS AND STANDARD DEVIATIONS FOR SUBSCALE SCORES

		FOCUS		ANALYSIS		MODERATION		EQUIVOCATION	
	N	X	SD	X	SD	X	SD	X	SD
BOTH	68	1.54	0.54	1.63 *	0.52	1.70	0.69	3.20	1.15
PRINCIPAL	24	1.79	0.65	2.03 *	0.42	1.69	0.50	2.83	1.11
TRAINER	3	1.50	0.60	1.67	0.99	1.78	1.35	3.00	1.73

* marks groups significantly different on Scheffe post hoc analysis.

TABLE 8
MEANS AND STANDARD DEVIATIONS FOR ALTERNATIVES AND SCRIPT ITEMS

	ALTERNATIVES			SHARED SCRIPT TAPE		
	N	X	SD	N	X	SD
BOTH	67	2.01 *	0.91	66	1.91 *	1.11
PRINCIPAL	24	2.63 *	1.10	23	2.70 *	1.43
TRAINER	3	2.00	1.00	3	1.33	0.58

* marks groups significantly different on Scheffe post hoc analysis.

TABLE 9
TEACHERS' PERCEPTIONS OF EFFECTS OF TRAINING
EXPRESSED AS PERCENTAGE OF TEACHERS RESPONDING TO ITEM

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE
POSITIVE EFFECT	44.9	47.0	5.1	2.5	0.5
INCREASED CONFIDENCE	40.4	44.4	8.1	5.6	1.5
INCREASED UNDERSTANDING	43.7	44.6	7.1	4.1	0.5
INCORPORATE NEW TECHNIQUES	43.2	50.3	3.0	3.0	0.5

FREQUENCY OF USE

	DAILY	EVERY OTHER DAY	2 TO 5 TIMES PER WEEK	WEEKLY	MONTHLY	RARELY
USE IN LESSON PLANS	68.1	1.0	5.6	16.2	1.5	7.6
USE IN DISCUSSION WITH COLLEAGUES	31.9	3.6	10.2	22.3	5.6	26.4

TABLE 10
NUMBER OF FORMATIVE OBSERVATIONS DESIRED
BY TRAINING CATEGORY

	MEAN	SD
PET2	1.13	0.92
PET1	1.53	1.21
PET0	1.38	1.29
NOPT	2.59 *	2.02

* marks groups significantly different on Scheffe post hoc analysis.

TABLE 11
CHI SQUARE ANALYSIS OF ALL GROUPS
COMPARING DESIRE FOR ANY COACHING OR FORMATIVE OBSERVATIONS

	WHETHER TEACHERS WANT OBSERVATIONS			
	NO		YES	
	N	%	N	%
PET2	14	26%	39	74%
PET1	14	18%	63	82%
PET0	17	26%	49	74%
NOPET	3	5%	58	95% *

CHI SQUARE (df = 3) = 11.883, P = 0.008

TABLE 12
FREQUENCY DISTRIBUTION OF TEACHERS BY GROUP
BY NUMBER OF COACHING OR FORMATIVE OBSERVATIONS DESIRED

OBSERVATIONS DESIRED	0	1	2	3	4	5	6	7	8	9
PET2	14	22	14	2	1	0	0	0	0	0
PET1	14	28	24	4	6	0	1	0	0	0
PET0	17	24	17	1	6	0	1	0	0	0
NOPET	3	16	20	7	9	1	1	0	2	2

APPENDIX

TABLE 1
MEANS FOR CLASS ENROLLMENT AND TEACHER AGE

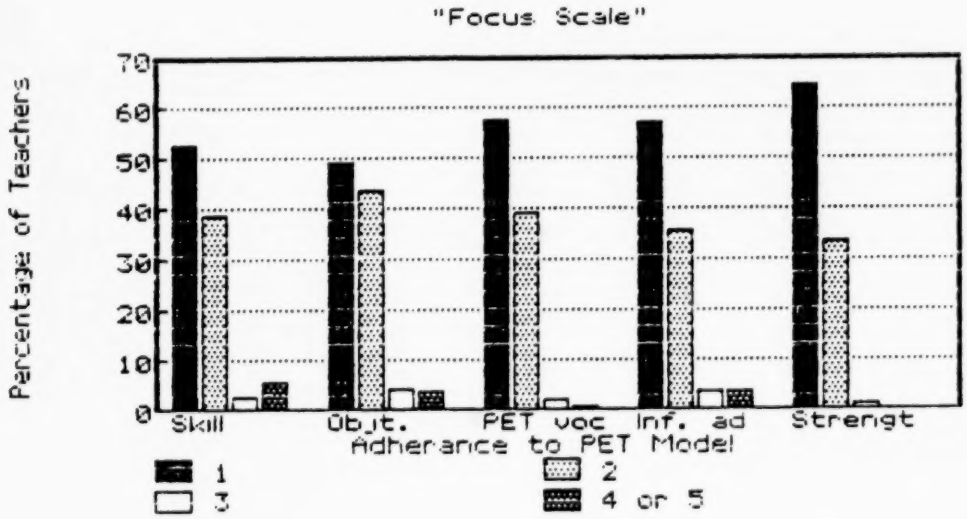
	N	MEAN ENROLLMENT	MEAN AGE
PET-2	53	20.9	39.9
PET-1	80	21.5	37.9
PET-0	69	22.1	36.1
NOPET	73	21.9	36.4
TOTAL (N=275)		21.67	37.5
(SD)		(3.84)	(9.6)

TABLE 2
TEACHER EXPERIENCE BY CATEGORY

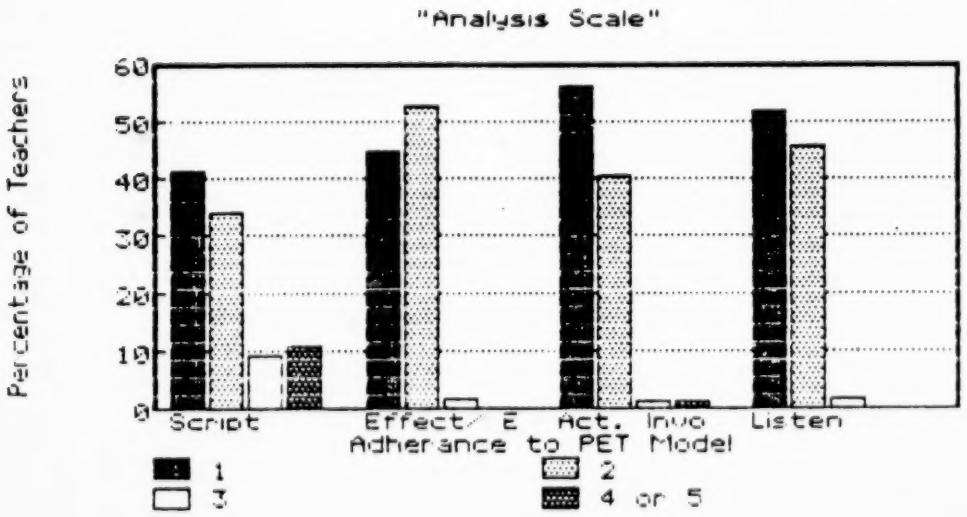
	CATEGORY				
	PET-2	PET-1	PET-0	NO PET	TOTAL
0-4	1	9	11	15	36
5-9	12	20	20	18	70
10-14	16	20	13	10	59
15-19	8	11	11	3	33
20 +	8	12	3	13	36

CHI SQ = 25.11, p=.014

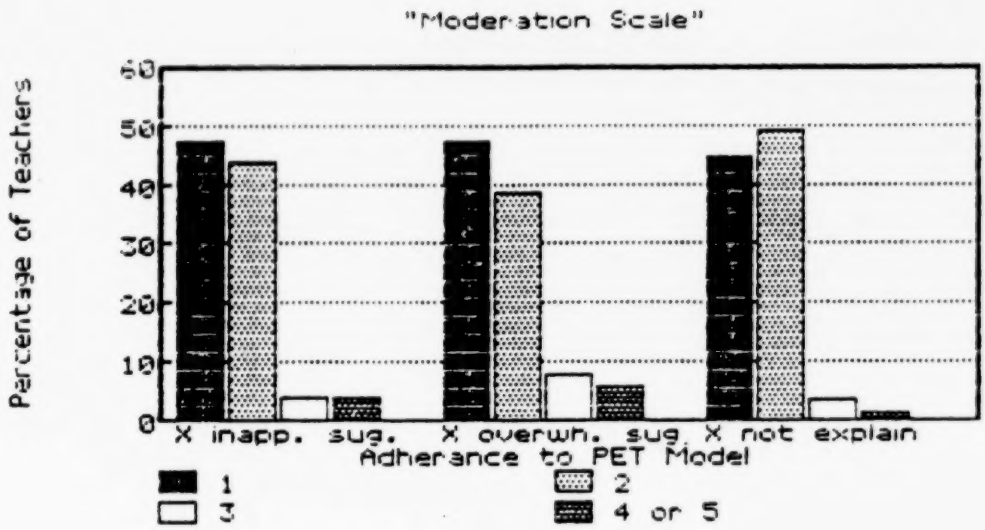
GRAPH1



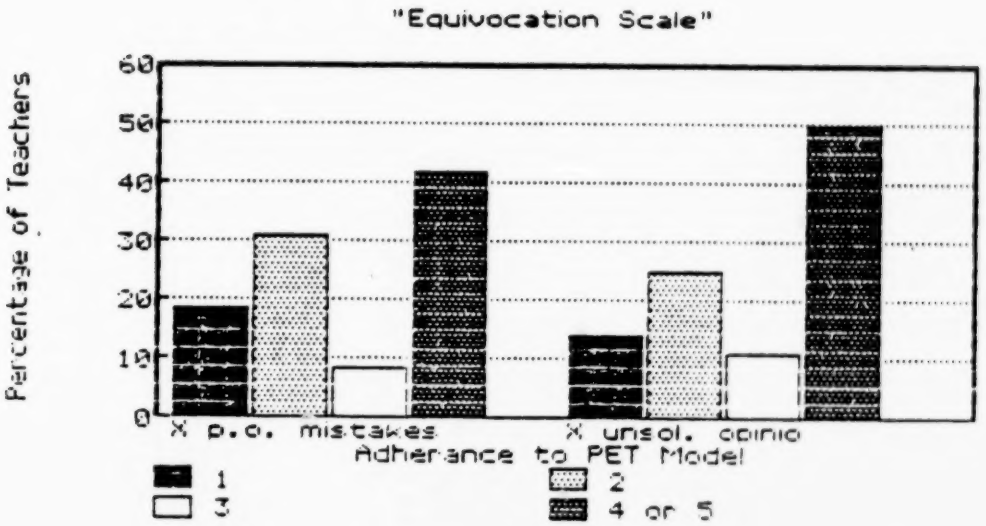
GRAPH 2



GRAPH 3



GRAPH 4



APPENDIX

TABLE OF SPECIFICATIONS

NON-PET QUESTIONNAIRE

	CONTRACT, CLASS TYPE, STAFF DEVELOPMENT	CLASSROOM OBSERVATIONS	PERCEPTIONS OF PET	DESIRE FOR OBSERVATIONS	TOTAL
QUANTITY		3	1	1	5 (36%)
TYPE/PURPOSE	3	3			6 (43%)
FEEDBACK		3			3 (21%)
TOTAL	3 (21%)	9 (65%)	1 (7%)	1 (7%)	14 (100%)

TABLE OF SPECIFICATIONS

PET QUESTIONNAIRE

	CONTRACT, CLASS TYPE, STAFF DEVELOPMENT	TRAINING & OBSERVATION	SUBSEQUENT COACHING	REPORTED USE	DESIRE FOR OBSERVATIONS	TOTAL
QUANTITY	3	1	3	2	1	10 (26%)
QUALITY		4	19	3		26 (69%)
MOTIVATION/ CONFIDENCE	1			1		2 (5%)
TOTAL	4 (11%)	5 (13%)	22 (57%)	6 (16%)	1 (3%)	38 (100%)

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TEACHER QUESTIONNAIRE

1.1 What motivated your participation in PET training? (Circle all that apply.)

1. I volunteered. (If so, why? _____)
2. My principal requested that I participate.
3. Other (Please specify.)_____

1.2 Type of contract (Please circle the appropriate number.)

1. Provisional
2. Annual
3. Continuing

1.3 Type of class during current school year (Please circle the appropriate number.)

1. I teach the same students all day (except for those who receive special services).

2. I teach different groups of students.
(If so, how many different groups?_____)
(If so, which subjects?_____)

2. Please indicate any staff development programs and/or special training in which you participated which had the objective of improving instruction (during the 1985-1986 or 1986-1987 school years). Do not include in-service workshops of one day or less. (Circle numbers of all that apply.)

1. None
2. R.S.S.T. (Resident Supervisory Support for Teachers)
3. Organized program of conferencing with other teachers
4. Other (Please specify.) _____

3. Please evaluate the following aspects of your PET training on a scale from 1 to 5 where

SA = Strongly agree
A = Agree
N = No opinion
D = Disagree
SD = Strongly disagree

3.1 Concepts were presented in a clear, organized, focused manner	SA	A	N	D	SD
3.2 The examples and activities presented were relevant and applicable to a classroom setting.	SA	A	N	D	SD
3.3 The PET instructor modeled principles of learning during his/her presentation.	SA	A	N	D	SD

4. How many times was your teaching observed for coaching during the PET training process (in your classroom or in another situation such as a demonstration lesson.) Circle number.

0 1 2 3 4 5 6 Other (Specify)_____

5. Overall, I would evaluate the coaching during the PET training as

1. Excellent
2. Good
3. Fair
4. Poor

How many times has your teaching been observed <u>for coaching since the end of the PET training</u> and by whom? (Include total for all years.)

6.1 PET trainer

0 1 2 3 4 5 6 7 8 Other (Specify.)____

6.2 Principal

0 1 2 3 4 5 6 7 8 Other (Specify.)____

6.3 Other (Specify.)_____

0 1 2 3 4 5 6 7 8 Other (Specify.)____

If you have received no coaching since the end of PET training, omit question 7 and all parts of question 8. Please answer the remaining questions, beginning with question 9.

If you have been coached by more than one individual since the end of PET training, answer questions 7 and 8 with regard to the person you consider to be your <u>primary coach</u>.

7. How soon after the observation did you and the coach usually meet to discuss the lesson? (Please circle only one number.)

1. the day of the observation
2. the day after the observation
3. two to five days after the observation
4. more than five days after the observation

8. The following relate to behaviors of the coach during conferences. Please answer by circling the number which best describes your perception where

SA = Strongly agree
A = Agree
N = No opinion
D = Disagree
SD = Strongly disagree

8.1 The coach informed me in advance of the purpose of the observation. SA A N D SD

8.2	The conference focused on a specific instructional skill or skills.	SA	A	N	D	SD
8.3	The coach helped me analyze the lesson using PET terminology.	SA	A	N	D	SD
8.4	The coach gave unsolicited opinions about how the lesson should have been taught.	SA	A	N	D	SD
8.5	The coach asked me to describe the decisions I made in planning the lesson.	SA	A	N	D	SD
8.6	The coach immediately pointed out mistakes he or she believed I had made.	SA	A	N	D	SD
8.7	The coach discussed with me relevant behaviors in the lesson in terms of effectiveness or efficiency.	SA	A	N	D	SD
8.8	The coach listened carefully to my comments.	SA	A	N	D	SD
8.9	The coach reinforced the strengths of the lesson.	SA	A	N	D	SD
8.10	The coach helped me think about alternate ways of teaching.	SA	A	N	D	SD
8.11	I was actively involved throughout the conference.	SA	A	N	D	SD
8.12	The coach shared with me the labeled script tape from the lesson.	SA	A	N	D	SD
8.13	The coach communicated to me the specific objective of the conference.	SA	A	N	D	SD
8.14	The coach helped me discover possible solutions if there was a problem.	SA	A	N	D	SD
8.15	The coach left me with a clear idea of what had been accomplished in the conference.	SA	A	N	D	SD
8.16	The coach didn't allow me to explain the decisions I had made.	SA	A	N	D	SD
8.17	The coach made suggestions that were inappropriate.	SA	A	N	D	SD
8.18	The coach made suggestions that were overwhelming.	SA	A	N	D	SD

9. How many times per year would you like to receive coaching with the PET model?

0 1 2 3 4 5 6 7 8 Other (Specify.)____

10. How often do you use PET concepts or terminology in discussing classroom teaching performance with your colleagues?

1. daily
2. every other day
3. two to five times per week
4. weekly
5. monthly
6. very rarely or only in preparation for observations

11. How often do you consciously employ PET concepts in making lesson plans?

1. daily
2. every other day
3. two to five times per week
4. weekly
5. monthly
6. very rarely or only in preparation for observations

12. Please give your general perceptions of how PET training has changed your teaching, using the best response.

SA = Strongly agree
A = Agree
N = No opinion
D = Disagree
SD = Strongly disagree

12.1 The PET training I have received has had a positive effect on my classroom performance.	SA	A	N	D	SD
12.2 The PET training has increased my confidence in my teaching ability.	SA	A	N	D	SD
12.3 PET training has increased my understanding of why certain procedures work well in the classroom.	SA	A	N	D	SD
12.4 PET training has caused me to incorporate some new techniques into my teaching.	SA	A	N	D	SD

Use the space below for any additional comments you wish to make about your PET training and/or coaching.

No part of this instrument may be used without the authors' permission. Permission may be requested by writing Professor Garrett K. Mandeville, Department of Educational Psychology, Wardlaw College, University of South Carolina, 29208.

TEACHER QUESTIONNAIRE

1. Type of contract (Please circle the appropriate number.)
   1. Provisional
   2. Annual
   3. Continuing

1.2 Type of class during current school year (Please circle the appropriate number.)

   1. I teach the same students all day (except for those who receive special services).

   2. I teach different groups of students.
   (If so, how many different groups?_____)
   (If so, which subjects?_____)

2. Please use the chart below to provide information on the following:

   a. The number of times your teaching has been observed during the 1986-1987 school year. (Observations may have been brief or may have lasted an entire class period.)

   b. The individual who observed your teaching. (Principal, other administrator, teacher, other)

   c. The purpose of the observations. (Enter "E" for evaluation, and "I" for other observations for improving teaching.)

   d. Whether you received feedback from the observer. (Enter "0" if there was no feedback, "+" if the feedback was generally positive, "-" if the feedback was generally negative.)

Observer	Number of times	Purpose E or I	Feedback 0, +, or -
Principal	_____	_____	_____
Other administrator	_____	_____	_____
Teacher	_____	_____	_____

3. Please indicate any staff development programs and/or special training in which you participated which had the objective of improving instruction (during the 1985-1986 or 1986-1987 school years). Do not include in-service workshops of one day or less. (Please circle numbers of all that apply.)

   1. None
   2. Organized program of conferencing with other teachers
   3. Other (Please specify.) _____

4. What perceptions of PET training do you have? (Please circle number.)

   1. I don't know anything about it.
   2. It has been described to me briefly, but I know very little about it.
   3. I have learned a lot about it, and have even tried to apply some of the concepts in my classroom.
   4. To the best of my knowledge, I apply the principles of PET even though I have not been through the training program.

5. How many times per year would you like to have your teaching observed for the purpose of improving instruction?

   0 1 2 3 4 5 6 7 8 Other (Specify.) _____